Monitoring Data Record

Project Title: NC 49 (R-2533B) COE Action ID: 1997702364
Stream Name: UT Cold Water Creek Site #20 DWQ Number: 011274
City, County and other Location Information: Cabarus County, Sta. 156+50 to Sta. 157+00 –L1-RT.
Date Construction Completed: April 15, 2005
Monitoring Year: (1) of 5
Ecoregion: 8 digit HUC unit 03040105
USGS Quad Name and Coordinates:
Rosgen Classification: Proposed Reach is a E4 stream type
Length of Project: 130' Urban or Rural: Rural Watershed Size:
Monitoring DATA collected by: M. Green, J. Elliott, J. Young Date: 3/20/07
Applicant Information:
Name: NCDOT Roadside Environmental Unit
Address: 1425 Rock Quarry Road Raleigh, NC 27610
Telephone Number: (919) 861-3772 Email address: mlgreen@dot.state.nc.us
Consultant Information:
Name:
Address:
Telephone Number: Email address:
Project Status: Complete

Monitoring Level required by COE and DWQ (404 permit/ 401 Cert.): Level (**1**) ~~2~~ ~~3~~
Monitoring Level 1 requires completion of *Section 1, Section 2 and Section 3*

Permit States:

- The stream shall be monitored for a duration of five years from the end of construction (channel modifications and vegetation planted).
- The data shall be collected and submitted to the US Army Corps of Engineers and N.C. Division of Water Quality no later than January 1st each year for five years after construction
- At Site #20, 130 linear feet of stream channel will be relocated. A permanent cross section shall be established in a meander and at an inflection point along the channel.
- In order to evaluate the stability of the new channel, the channel cross section at each permanent station identified above shall be measure on a yearly basis for five years and width:depth ratio compared to the as-built cross section

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Section 1. PHOTO REFERENCE SITES
(Monitoring at all levels must complete this section)

Total number of reference photo locations at this site: 2 photos were taken of this stream relocation
Dates reference photos have been taken at this site: 3/20/07

Individual from whom additional photos can be obtained (name, address, phone):

Other Information relative to site photo reference:

If required to complete Level 3 monitoring only stop here; otherwise, complete section 2.

Section 2. PLANT SURVIVAL
Attach plan sheet indicating reference photos.

Identify specific problem areas (missing, stressed, damaged or dead plantings):

Estimated causes, and proposed/required remedial action:

ADDITIONAL COMMENTS: A onsite meeting was held on March 8, 2007 with the Resource Agencies and NCDOT. It was agreed upon at this time that Site #20 could be closed out after one year of photo monitoring the stream relocation. Onsite vegetation consisted of black willow, silky dogwood, tulip poplar, cottonwood, and sycamore. The planted vegetation is surviving. NCDOT proposes to discontinue vegetation monitoring at this site.

If required to complete Level 1 and Level 2 monitoring only stop here; otherwise, complete section 3.

Section 3. CHANNEL STABILITY

Visual Inspection: The entire stream project as well as each in-stream structure and bank stabilization/revetment structure must be evaluated and problems addressed.

Report on the visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. Include a discussion of any deviations from as-built and an evaluation of the significance of these deviations and whether they are indicative of a stabilizing or destabilizing situation.

This is the first year of monitoring at the UT to Cold Water Creek Site #20 stream relocation. The streambanks are stable throughout the stream relocation. An onsite meeting was held on March 8, 2007 with the Resource Agencies and NCDOT. It was agreed upon at this time that Site #20 could be closed out after one year of photo monitoring the stream relocation. Cross sections of the stream relocation were not required by the Resource Agencies. NCDOT has completed the one year of photo monitoring and proposes to discontinue stream stability monitoring at this site.

Date Inspected	Station Number	Station Number	Station Number	Station Number	Station Number
Structure Type					
Is water piping through or around structure?					
Head cut or down cut present?					
Bank or scour erosion present?					

NOTE: Attach separate narrative sheets to each monitoring report describing/discussing the overall monitoring results. Include the identification of specific problem areas/channel failures, estimated cause and proposed/required remedial action. This should include a brief discussion of any parameter that has changed significantly from as-built.

UT Cold Water Creek Site #20

Photo #1 (Upstream)

Photo #2 (Downstream)

Year 1 – March 2007